Application No.: 10/724,194

REMARKS

Atty. Docket No.: SYNI-007

Claims 18-30 and 39-58 were pending in this application. Claims 18 and 25 have been amended and claims 26-27 and 29-30 have been canceled without prejudice herein. Claims 39-58 have been withdrawn as being drawn to a non-elected invention. Accordingly, upon entry of this amendment, claims 18-25, 28 and 39-58 will be pending.

Cancellation of and/or amendments to the claims should in no way be construed as acquiescence to any of the Examiner's rejections and were done solely to expedite prosecution of the above-identified application. Applicants reserve the option to further prosecute the same or similar claims in the instant or in another patent application(s).

No new matter has been added; support for the amendments made to claims 18 and 25 can be found in the specification as filed and/or in the claims as previously pending. Specifically, support for the amendment to claim 18 can be found at least at page 67, lines 1-2. No additional search is required and no new issues have been raised by the amendments made herein. Specifically, the Examiner previously searched prior art pertaining to WTA of S. aureus, regardless of structure. Furthermore, in view of the amendments and arguments set forth herein, the number of issues for appeal have been reduced. It is believed that the Examiner's rejections under §102(b) have been obviated by claim amendments and cancellations. Therefore, the claim amendments and cancellations made herein are permissible under 37 C.F.R. §1.116 as reducing the number of issues for appeal, and Applicants respectfully request that the present Amendment be entered.

Election/Restriction

It is Applicants understanding that upon the indication of allowable subject matter,
Applicants will be entitled to rejoinder of claims 39-58, which ultimately depend from claim 18.

Objection to Claims 26-27 and 29-30

The Examiner objects to claims 26-27 and 29-30 as being of improper dependent form for failing to further limit the subject matter of the claims from which they depend. While Applicants traverse this objection for the reasons set forth in the previous response, in the interest

of expediting prosecution of the application, claims 26-27 and 29-30 have been canceled without prejudice herein.

Rejection of claims 18-30 Under 35 U.S.C. §102(b)

The Examiner has maintained rejections 18-30 under 35 U.S.C. §102(b) as being anticipated by Fisher et al (WO 98/57994) as evidenced by (PG Pub 20030228322A1). This rejection is respectfully traversed.

In order to anticipate a claim under §102(b), a single prior art reference must disclose, either expressly or inherently, each and every limitation of the claim. Atlas Powder Co. v. IRECO, Inc., 190 F.3d 1342, 1346 (Fed. Cir.1999). Under principles of inherency, "if the prior art necessarily functions in accordance with, or includes, the claimed limitations, it anticipates." Mehl/Biophile Int'l Corp. v. Milagraum, 192 F.3d 1362, 1365 (Fed Cir. 1999). The fact that a certain result or characteristic may occur in the prior art is not sufficient to establish the inherency of that result or characteristic. In re Rijckaert, 9 F.3d 1531, 1534 (Fed. Cir.1993). Instead, the reference includes an inherent characteristic if it is "the natural result flowing from the reference's explicitly explicated limitations." Eli Lilly & Co. v. Barr Lab., 251 F.3d 955, 970 (Fed. Cir. 2001).

The claims presently under examination are directed to pharmaceutical compositions comprising a therapeutically effective amount of an antibody, antigen binding fragment of an antibody or a combination thereof that specifically binds to wall teichoic acid (WTA) of S. aureus.

In contrast, the Fischer et al patent cited by the Examiner under 102(b) teaches, inter alia, antibodies that bind to lipoteichoic acids (LTA) of Staphylocci, including S. aureus and S. epidermidis. As set forth in the previous Response, WTA (to which the presently claimed antibodies specifically bind) and LTA (to which the antibodies taught by Fischer et al. bind) are structurally different molecules. LTA is primarily a poly(glycerol phosphate), while WTA is primarily a poly (ribitol phosphate). However, the Examiner is of the opinion that "the scope of the instantly claimed invention encompasses antibodies directed to both glycerol teichoic acid, ribitol teichoic acid, as well as the carbohydrates associated with the teichoic acid polymers presented by S. aureus based upon Applicant's definitions provided in the instant specification

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and the fact that S. aureus is known to produce both glycerol phosphate and ribitol phosphate WTA."

First, with respect to Applicants' definitions, Applicants specification at page 28, teaches that "antibodies raised against S. aureus WTA may recognize some common WTA modifications such as D-Alanine esters or GlcNAc modification and cross react with WTA from other staphylococcal species." However, the presently pending claims are not simply directed to antibodies "raised against S. aureus WTA" as in this passage of the disclosure, rather the pending claims are directed to antibodies that specifically bind to WTA of S. aureus. Although such WTA specific antibodies may also bind to WTA of other organisms that have the same WTA structure as S. aureus (such as L. monocytogenes; see the instant specification at page 28, paragraph 61), the presently claimed antibodies are specific for WTA. Therefore, such antibodies cannot bind to those epitopes of S. aureus WTA that may be shared with other, non-WTA bacterial cell wall components, e.g., LTA.

With respect to the WTA produced by S. aureus, the Examiner reasons that since S. aureus makes WTA that is both glycerol phosphate and ribitol phosphate in nature, the anti-LTA antibody of Fischer would inherently bind WTA of S. aureus. In support of this proposition, the Examiner cites several references which state that certain strains of S. aureus produce at least some glycerol phosphate WTA. Although Applicants concede that certain, unusual strains of S. aureus do comprise WTA that is both glycerol phosphate and ribitol phosphate in nature, this does not change the fact that the antibodies of the pending claims are specific for WTA of S. aureus and, therefore, do not embrace antibodies that are not specific for WTA. In contrast, the anti-LTA antibodies of the Fischer patent bind to, e.g., S. epidermidis in addition to S. aureus.

In an effort to make the claims more clear, the claims have been amended to indicate that the antibodies of the present claims bind to ribitol phosphate WTA, a form of WTA found in S. aureus.

Applicants further note that the claims have been amended to indicate that the antibodies block colonization with *S. aureus*. Applicants note, however, that such antibodies may also bind to WTA of other organisms that have the same WTA structure as *S. aureus* and may also block colonization with those organisms.

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SUMMARY

If a telephone conversation with Applicants' Attorney would expedite the prosecution of the above-identified application, the Examiner is urged to call Applicants' Attorney at (617) 227-7400.

Dated: May 16, 2006

Respectfully submitted,

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